

Application No. 10/549,784
Translation of PCT/DE03/00906
Response to Notification dated 5/8/06

Abstract

~~The invention relates to a semiconductor structure for~~

controlling a current (I); comprising a first n-conductive
5 semiconductor region (2), a current path that runs within the
first semiconductor region (2) and a channel region (22). The
channel region (22) forms part of the first semiconductor
region (2) and comprises a base doping. The current (I) in the
channel region (22) can be influenced by means of at least one
10 depletion zone (23, 24). The channel region (22) contains an
n-conductive channel region (225) for conducting the current,
said latter region having a higher level of doping than the
base doping. The conductive channel region (225) is produced
by ionic implantation in an epitaxial layer (262) that
15 surrounds the channel region (22).

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